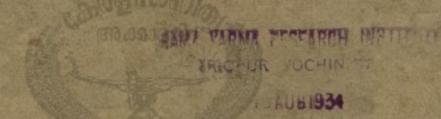


# ARCHÆOLOGICAL DEPARTMENT

ADMINISTRATION REPORT





# MAKE VARME PERFERRING INC.

TRIC-UR COCHIN STATE

# Proceedings of the Government of His Highness the Maharaja of Travancore.

H . 4.

Read:

Letter No. 492/32, dated the 10th October 1932, from the Superintendent of Archaeology, forwarding the Administration Report of the Department of Archaeology for 1107. 840

ORDER D. DIS. No. 1401 of 32/EDN., DATED TRIVANDRUM. 21st December 1932.

#### RECORDED.

During the year under review, the Department continued its activities in regard to the copying of inscriptions, the conservation of ancient relies, the study and investigation of temple architecture, the examination and identification of scenes and objects represented by specimens of temple scalpture and such other matters. Attention was also devoted to the further exposition of the Abhinaya or Art of Pantomime as exhibited in the ancient Rathakuli and the Kathu, and the collection of available information regarding the slabs of Salagrama stones used for worship, the elaborate process of temple ritual and the Mudras or the finger signs employed in the same. Research was made in the field of primitive music; and several specimens of indigenous folk songs were also collected and classified under eleven distinct Volume VII Part 2 of the Archæological series was published by the Department; and material for Vol. VIII was got ready for the Press. It is noted that copies of inscriptions collect-Led by the Department from 1103 to 1106 will be published in tha: Volume.

(By order)

K. GEORGE. Chief Secretary to Government.

To

The Director of Public Instruction in charge of the Administrative control of the Archæological Department.

The Superintendent, Government Press-

The Press Room.



# Frontispiece.



Ananta'ayanam, Ganapati and Nataraja. (Specimen of old woodwork, Vettikulangara)





#### Office of the Superintendent of Archaeology, Trivandrum, 6th October 1932.

No. 492/32.

From

The Superintendent of Archaeology, Trivandrum.

To

The Chief Secretary to Government, Trivandrum.

SIR,

I have the honour to forward herewith the Administration Report of the Department of Archeology for the year ending the 31st Karkutakam 1107 m. E. (1931-32).

#### General.

There was no change in the staff of the Department

during the year.

The Pandit-Assistant and the Clerk-Typist were on privilege leave for 20 and 23 days respectively: the photographer was absent on combined privilege and sick leave for four months and twenty-one days. The leave vacancies of the clerk-typist and photographer were alone filled up.

An event of outstanding importance in the year was the investiture of H. H. The Maharaja with ruling powers. In the exhibition that was beld in connection with the celebrations, the dispartment took an active part. The section devoted to the display of objects of historical and archaeological interest was furnished with rare and valuable exhibits illustrating the grand heritage of the past, and was appreciated as being of considerable educative value.

As part of His Highness's administrative training, an opportunity was graciously accorded to me as head of the department to explain the nature, scope and value of archaeological work in Travancore to His Highness the Maharaja, who showed a deep and abiding interest in the working of the department.

Tours.

I spent 62 days in camp and visited Kalingarayan Pattanam, Nagercoil. Katukkara, Vettikkavila, Quilon, Mararikulam, G. P. T. 862, 60, 28-6-1109 B Puttenchira, Kanjīrapallī, Kaviyūr, Chonakkara, Sattanūrppāra, Okkal, Kanjyākuļam, Kuttarpalli, Parūr, Pallippuram, Kottappuram, Vetūkkulangāra, Chenkotta, Māvēlikkara, Alleppey, Manjumel, Varapoly, Ettumanūr, and Kottayam. The Pandit-Assistant visited Suchīndrum, Tāmarakkuļam, Cape Comorin and Kurattiyara; and camped for 12 days to take estampages of unpublished inscriptions. My tours were mainly directed to the exploration of ancient relics and the examination of the valuable works of art in the temples of the State. Special attention was paid to the collection of unpublished inscriptions which had escaped the notice of the department in the pest. An attempt was also made towards the study of folklore having regard to its importance in a scheme of archaeological work. The work done during the year may roughly be classified as follows:—

## Epigraphy.

A good deal of the exploratory work of the department in the year consisted in the copying and reading of ancient inscriptions. Estampages of seventeen unpublished inscriptions were taken; and their texts were deciphered and transcribed. Of these, three inscriptions were from Katukkara, two copied from a rock lying in the Tiruvenkatapperumal temple and one from a stone-pillar standing in the Panantara Vilagam village. The two temple inscriptions are dated Kollam 882 (1707 A. D.), and refer to gifts of land to Tiruvenkatapperumal, Kāsiviāvanātapperumāl and Sivakāmi Amman; while the pillar inscription from Panantāra Vilāgam registers a gift of land by two private donors to Vīrakēraļapiļļayār of Pananthāra Vilāgam and is dated Kollam 887 (1712 A. D.)

The fourth inscription was copied from the northern outer wall of the first prākāra of the Sthanunatha temple, Suchindram. Though damaged at the end, it records like many other inscriptions in the same temple, a gift of land to the God Umaskanda-Sahita-Tirumeni set up by Arangan Tiruvikraman of Sīvalamangalam. Its date is Kollam 301 (1126 A. D.), and though it had been copied in the years 1093 and 1096 M. R., a fresh estampage of it was found necessary for purposes of reading and publication.

The fifth inscription was obtained from the stone rafter of the Jayantīšvara mantapa in the Suchīndram temple, and mentions that the Brahmin chief of Puttillam consecrated God Sambhu with Gouri in Kollam 769 (1594 A. D). Though in the previous inscriptions it is stated that the deity Umaskantha Subita Tirumeni was set up in Kolt in 301 (1126 A. D.), we do not know if the two differ in purpose-

The sixth inscription dated Kollam 413 (1238 A. D.) is engraved on the south base of the Subrahmanya temple, Suchindram, but as the stone bearing the record is mostly embedded underneath the ground, its purport could not be known; nor is it easy to rescue and bring it to light without considerable labour and heavy expense.

The seventh inscription though copied before in 1093 M. E. was recopied for purposes of reading. It is inscribed on the pillar in front of the Panchalinga shrine at SuchIndram. It is dated Kollam 586 (1411 A. D.), and states that King Mārttāndavarma, desiring prosperity, fame and long life, constructed the Sabhāmanifapa. The same inscription is also seen engraved on the eastern wall of the Second prākāra of the SuchIndram temple. It is probable that the stone effigy near the Salhāmanitapā may be a sculptured portrait of the king who constructed the same.

The eighth one is dated Kollam 318 (1143 A. D.), and refers to a gift of seventyone Achchu by a certain Kēralam Vikrama Chōjadēvan to the God of SuchIndram for the sake of offering tiruvamutu when mantrās are chanted.

The ninth is found on the western wall near the Vahanappura at Suchindram, and mentions a gift by Chokkattandal alias Ulaka-Mulutudaiyal, the Nambirattiyar of Vira Pandya, of two hundred Putupon-achchu for daily tiruramutu to Suchindramudaya Nainai and for feeding three Brahmins during the time of the Pajas. The date of the inscription is Kollam 432 (1257 A. D.). It is conjectured that this Vīra-Pāndya islthe same Jata varman-Vīra Pandys who began his rule about the middle of A. D. 1253 and continued to rule at least till 1274-5. Most of his inscriptions come from Tinnevelly, Ranmad, Madura, and Pudukkotta, and the record mentioned above is the first of its kind discovered in Travancore Inscriptions ten and eleven though old and are dated Kollam 328 (1153 A. D.) and 340 (1165 A. D.) respectively, are unfortunately damaged and fragmentary; while twelve and thirteen copied fron the Dyaraka-Emperuman temple near the Suchindram choultry are complete and in a fair state of preservation. The former dated Kollam 404 (1229 A. D.) registers a gift of laud by the Assembly of Suchindram to Dvaraka Emperumanar; while the latter dated Kollam 400 (1225 A. D.) records a gift of ten Achchu for burning perpetual light in the temple of the same God.

Of the rest, two were from the Kanyā-Bhagavati temple, Cape Comorin, one of which is in Sānskrit Grantha and mentions the Vijayanagara kings Vīranrisimha, Atchutarāya, Ranga Rāya, Kṛṣṇa Rāya, and Rāma Rāya; while the other though damaged rafers to the Chōļa king Rājēndra Chōļa. The seventeenth though a fragmentary and damaged Vaṭṭeluttu record is important referring as it does to the Chōļa king Parakēsari Varma. The last one inscribed on the base of the Sāsta temple at Chāttannār and dated Kollam 446 (1127 A. D.) is in Vaṭṭeluttu, and refers to the building of the temple in that place.

In addition to these inscriptions, a copy of one copper plate record received on requisition from the District Judge, Nagercoil, was also examined; and it was found dated Kollam 826 (1651 A.D.) registering a gift under Royal command of ten temples including the Krisnankoil at Vatasseri to Sri-Ranga Raja Pattar Nambiar of Alvar-tirunagari. Whether the plate is genuine or spurious is a matter to be decided after personal inspection.

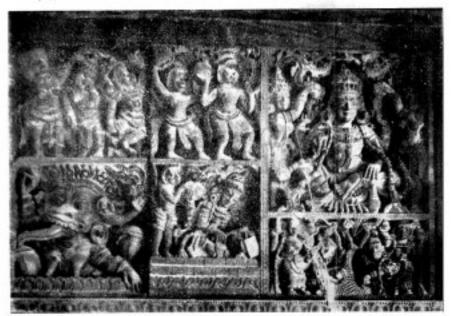
A systematic recording of the inscriptions on Christian Tombs and monuments in Travancore, having historical or archaeological importance seemed a great desideratum; and with the kind permission of Government (vide Government letter R. O. C. No. 1565/32/E dated 23rd June 1932), steps were taken towards the close of the year in that direction; and the text of twelve inscriptions was noted down by me.

#### Conservation.

As in the previous year, the question of the preservation of ancient relics received my attention; and it was recognised as part of the obligations of the Department to recommend to Government those monuments that appeared to stand in urgent need of care and rescue. Considerable impetus was given to the work of conservation of the ancient monuments of the State; and my suggestion for the erection of a suitable canopy to the stone image of Buddha at Mavelikkara, and for the preservation of the works of art in the Ettumanur temple were kindly accepted by Government. Government were also requested to consider the desirability of declaring the old Palaces at Eraniel, Padmanabhapuram, Putukkulangara and Krishnapuram, and also the Mallan Tamburan Koikkal at Netuvangad as Protected monuments; as, being buildings of historical interest and importance, they have a right to be preserved and kept in permanent good repair.



# To face page 5.



Woodwork from Chonakkara.

#### Architecture.

An aspect of work on which some considerable labour was spent in the year related to the further study and investigation of temple architecture in Kēraļa with special reference to Trāvancōre. The rules and principles laid down in the Silpašāstrās for the construction of the Namaskāra Mantapa, Nālambalam (sugrambalam) and Balikkappura were gone through and noted down; and the study of the principles of architecture in Kāttambala (temple theatre) was taken up towards the end of the year.

## Soulpture.

The exploration of ancient relies in the year brought to light the existence of excellent specimens of old wood sculpture at two places, Chonakkara and Vettikkulangara; and some considerable time was spent on the examination and identification of the scenes and objects represented by them. Around the central shrine of the Siva temple at Chonakkara, are seen carved in excellent workmanship a few miscellaneous scenes and episodes in the lives of Siva, Rāma, and Krishņa displaying a unique charm and beauty. They are:—

1. The Tandava dance of Siva;

2. The wedding of Parvati;

3. The battle of Arjuna with Siva in the gu'se of a hunter;

4. Siva's penance;

The wedding of Droupadi, and the Pandavas' march for the same;

6. The killing of Hiranya;

 Select scenes from Ramayana such as Sītasvayamvara; the battle with Bali; Sīta in Ravaņa's court etc;

Mahishāsura Mardana;

9. Kaliya Mardana;

10. Rukmani and Krishna; and

11. Ananta Sayana.

In the other place Vettikkulangara, the wood-work is done skilfully over the ceiling of the Balikkappura, and on some detached panels which are in the course of being fitted up in the temple that is renovated there. Almost the whole of Bhagavata and Ramayana with the leading episodes in them are illustrated in these wonderful specimens of wood sculpture preserved at Vettikkulangara temple. On examination it is found that the art displayed in the

work at both temples has not only a high order of excellence but also distinct characteristics of workmanship. The carvings of the form of Divine beings and their contours have a sublimated rhythm and symmetry. Every scene depicted in them has a Bhava or feeling of transcendentalism, and Ananda or spiritual exhibaration. Above all, there is a sublimated humanism finding free play in the portrayal of the different characters and their emotions. figures have a peculiar charm of chiselling, the eyes, nose, lips, chin, hands, fingers and legs, receiving the greatest attention. At the same time, the balance and poise in which they are cast and the exquisite rhythm and beauty of their representation add greatly to their artistic charm. Supreme examples of a wonderful combination of both Rapa (beauty of objective representation) and Rasa (grace of emotional expression), these specimens of wood sculpture have a grandeu: and sublimity of conception, rarely to be found elsewhere.

## Iconography.

Another important work of the department in the year related to the collection and investigation of available materials relating to Sālagrāma, an iconographical form in which the original Vishņu is worshipped as enclosing within him the potentiality of the whole universe, just as the potential individual is enclosed in the womb. This Hiranya Garbha form is depicted for concrete realisation in the Sālagrāma, a semi ovoid blackstone containing a fossil Ammonite, the fossilised part being striped with golden colour, which both by its form and appearance, is eminently fitted to symbolise Hiranya Garbha. Fairly exhaustive information regarding the shape, features, and marks of over eighteen varieties of Sālagrāma together with their respective value in worship and ritual were collected; and a note prepared on the subject is given in Appendix C.

#### Mudras.

The work of last year on Mudrās had attracted the attention of some of the foreign scholars and orientalists who commended the usefulness of my researches in that field. This year, a considerable part of my time was spent in pursuing my investigations in that direction, particularly the Tāṇtric Mudrās found in vogue in Kēraļa. About one hundred and eight Mudrās are noted to be peculiar to the Malayāļam speaking country, of which a chart of the principal ones was prepared in the year.

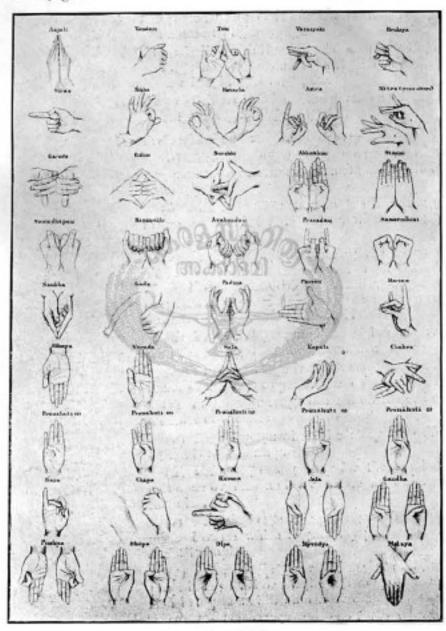
These Mudrās are symbols of the hand representing by visible signs, the expression of an idea or the suggestion of an idea by resemblance or convention. They form a sort of language, and have a peculiar symbolism and signif cance in their usage.



Dikpālās from Vettikuļangara-







(Copyright)

The term Mudra is borrowed from Hindu religious vocabulary, and signifies in its technical acceptance and connotation the poses that are given to the hands during the exposition of an idea. These Mudrās are not similar to Hieroglyphics, and are more expressive and powerful in effect than the spoken language. Classified roughly, they fall into three broad divisions:—

- 1. Vaidie.
- Tāntric.
- 3. Loukik (Mudras in Art).

A careful research in the field revealed the usage of 64 recognised Mudrās in Art and 108 in Tantra. The Vaidic Mudrās are more or less finger signs or indications employed to regulate the stress, rightm and intonation in the chanting of Vēdās by Brāhmins. To express symbolically one's ideas and sentiments is the object of the Mudrās; and adepts have ascribed particular postures to represent and express different sentiments. What can't be conveyed in language is generally expressed by the suggestive symbols of the Mudrās, and so they can be said to be more effective and impressive than the letters that form the alphabet of language.

#### Folklore.

Recognising the abundance of folklore in Travancore and in the rest of Kerala, and the important place it holds in the cultural history of the people, some useful work was done in the year towards a preliminary investigation and study of available material in the country. Folklore in Travancore as in the rest of Kerala comprises of folk traditions, festivals, songs, customs, superstitions etc; and includes in its scope the study of popular arts and crafts, of proverbs, legends and stories, songs, riddles, and superstitions. My main attention was directed towards a general and preliminary survey of folk songs in the State; and so far as one could gather, there are over 500 songs even now extant in Kerala. My researches in this direction, made me feel that the songs available in Travancore are of a varied kind, and can be classified broadly into eleven distinct groups.

- Songs dealing with Purănic and legendary history, such as Guru Dakshinappățțu and Santāna Gêpălam Păna.
- Songs in praise of God or invoking Divine help, such as Stotras and other prayer songs, anonymous in their nature and sung usually in every home.

Dr. arnold Bake of the Kern Institute, Leyden has since been touring in the State and recording their specimens with the assistance rendered by me under the auspices of Government.

- Songs inculcating moral instruction, and didactic in purpose, such as Thumpipāṭṭu and Arivupāṭṭuka!.
- Songs inculcating Vēdāntie truths, and Sāstraic in nature as Vaļļuvarpāttu.
- Songs dealing with Heroic exploits, such as Vaţakkan-Păţţukal, Tampurān Pāţţu, Anjunhamburān pāţţu, Eravikutţi Pilļai Pāţţu, etc.
- Songs of historical importance such as Māmānkam, Mārgampāţţu, Pallippājţukal.
- Professional and religious songs:—
  - (a) Šāstrāngappāţţu, sung on occasions of marriage, anniversary etc. among Nambudiri Brāhmins and Kshettriyās.
  - (b) Nangiyār pāṭṭu sung in the dramatic performance called Nangiyār Kāṭtu, where dancing and acting play a prominent part.
  - (c) Brāhmaṇipāṭṭu resembling the songs of the Todās in certain respects, and also the chanting of Sāma-Vēda by Nambudiri Brāhmins, sung on special occasions of domestic ceremonies such as marriage, etc. among the higher castes in Malabār.
  - (d) Tīyāṭṭu Pāṭṭu sung in a religious show dealing with the killing of the monster. Dāruka.
  - (e) Pullwar Pāṭṭu (serpent songs) songs sung in praise of serpents to please them.
  - (f) Pāṇaṛpāṭṭu songs to ward off the evil eye and mischief of enemies.
  - (g) Mannarpattu where the story of Chilappatikāram is told in song.
  - (h) Vēlanpāṭṭu song sung for the eradication of evil done by foes and for whose annihilation it is intended.
  - (i) Aivaṛkalipāṭṭu song sung to the accompaniment of dance which is generally performed in Bhadrakāļi temples.
  - (j) Bhadrakāļipāṭṭu or Kaļameļuttu Pāṭṭu. Songs propitiating Dēvi or Bhadrakāļi sung by the professional singers and drummers of the temples.
  - (k) Kaniyārpāṭṭu. Songs of the village astrologers called Kaniyārs and sung on occasions of their dance.

- Songs of amusement and entertainment such as Oņappāţţu, Kummaţţipāţţu, Kurattipaţţu, Ūññālpāţţu etc.
- Pūrappātţu obscene songs sung in praise of Bhagavathi.
- Cult songs such as Sastāmpāţţu or Ayyappanpāţţu, where there is a good deal of reference about the Pantaļam Rājās of Trāvancore,

 Miscellaneous songs dealing with some aspect of social life or other in Kerala.

On close examination, it is found that these songs have an unadorned purity and simplicity of diction, and an impassioned sweetness of melody. In their singing, Tāla, time measure, plays an important part; and sometimes the songs are sung to the accompaniment of dance, when a swiftness and rhythmic movement of steps give an added grace to the music. Ungoverned by any laws of versification, these songs have a universality of sentiment, combining in their Rāga (tume or Melody), different Bhāvās (Moods) and Rasās (emotions).

To the antiquarian, the value of these songs consists in their primitive spontaneous music containing melodies which are some of the most treasured possessions of Kerala art. Unique in their spontaneity and beauty, they have a wide range of outline; and are interesting as human documents throwing light on conditions of primitive life and thought. "The most interesting feature of them is that their vocal melodies are evolved with no thought of harmony or accompanying instrument, but are formed on certain natural scales or modes. In short, the dominant note that we find in these songs is that their music is instinctive, arising from the necessity inherent in the people to use the voice which nature has given them so that they may give expression to their innermost thoughts and feelings for which their speech is inadequate. The resulting fruit of this instinct is the sweet melody of the folksong which is an unconscious art quite in contrast with the creations of conscious art seen in songs sung by trained musicians". It may be of interest in this connection to note that the pure indigenous tunes Indisa, Purantr etc, are only refined elaborations of the melodies in the folk music of Kerala.

## Worship and ritual in Kerala Temples-

The work commenced last year on this subject was continued, greater attention being paid to the collection of information regarding the elaborate processes of temple ritual and the Mudrās employed in the same. As is seen from extant practices the old procedure laid down for Pāja is as follows:—

- Cleansing of the physical body. (Nād yādiśudhi)
- Consecration of the vessel holding oblation (Sankhapāraņa)
- Self-worship consisting in conceiving God as residing in oneself in the form of Ātma or supreme self (Ātmārādhana)
- Offering and consecrating the seat allotted for the Devata. (Pithakalpana and Pithapāja).
- Conceiving the Devata in a symbolical material form-(Marttikalpana).
- 6. Invocation of the Murtti or Icon. (Avahana)
- Consecrating and spiritualising the different parts of the body of the Dēvata. (Sakaļīkaraņa)
- 8. Meditation (Dhyana)
- Consecration and spiritualisation of the different ornaments, weapons or Ayudhās etc. of the Murtti. (Bhushaṇādinyāsa)
- 10. Offering water, sandal flowers, cooked food etc.
- 11. Dedication to the Martti.
- 12. End of worship. (Samapana)
- Detachment from the Murtti conception. (Udvasana).
- The conception of the Mürtti as the formless Paramatma and as residing in all created beings including the Sādhaka, (Layānga).

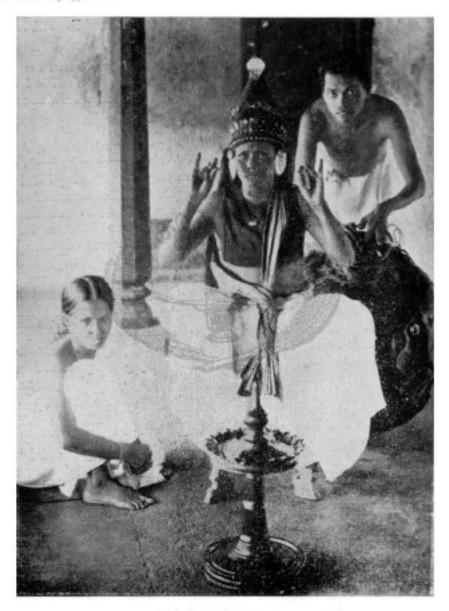
The diagrams of the important Mudras in Tantric workship were also drawn and are reproduced in the form of a chart.

#### Miscellaneous.

An important institution which has a hoary antiquity and which is fast disappearing attracted my notice in the year. It relates to "Kuttu" which devoid of its old charm still survives in a few temples of the State, and in which the traditions of the old classical Indian drama are even now preserved. There is reference to it in the Tamil Classic Chilappatikāram; and inscriptional evidences are not wanting to confirm its antiquity. A means of religious and popular education and entertainment, and above all of public censorship, the Kūttu in Trāvancōre as



# To face page 11.



Nangiarkūttu.

in the rest of Kerala had a powerful influence on the social fabric in olden days. My researches on the subject of Kathakali in Kerala, opened my eyes to the extensive influence which the 'Kuttu' had on the development of the old traditions of histrionic art in the land; and at the instance of the Dewan, an endeavour was made in the year to study and note down its ancient and characteristic art.

#### Kuttu is of three kinds:-

- Nangiyar Kuttu where a Nangiyar (a lady of the Nambiyar caste) is the actor, and in which the story of Sri Krishna is recounted with dancing and acting. Six kinds of dance were noted in this performance.
- Prabandham Kūttu which is a monologue consisting of a combined recitation of and commentary on passages from the Purānās and Itihāsās.
- 3. Kūtiyātṭam meaning combined acting, where men (Chā-kkiyārs) and women (Nangiyārs) take part, and in which there is a combination of narration and acting with dancing and gestures. The only place where the vestiges of Kūtiyāṭṭam are even now seen in Trāvancōre, is Mūlikkulam, in the ancient temple of which, there is performance every year lasting for 12 or sometimes 20 days.

What really interests the antiquarkan in the threefold varieties of Kāttu mentioned above, is the perfection of the art of Abkinaya and the elaborate use of the Mudrās (hand poses) and gestures which with slight modifications were borrowed later in Kathakaļi (the Pantomime). The Kāṭiyāṭṭam in particular, is a unique and wonderful institution where there is a strange combination of Nāṭya (acting), Abhinaya (Gesture), and Nṛitta (dancing), with a marvellous perfection of Bhāva (mood) and Rasa or emotional expression.

Sixty-four Mudrās were for a long time employed in the Kūttu, thirty-seven (24 single and 13 combined) Mudrās of which have been noticed by me. Nine movements of the head, eight glances of the eye, six movements of the eyebrows and four poses of the neck together with the hand Mudrās and dancing steps of the legs more or less complete the grace and rhythm of the gesture or Abhinaya of the Kūttu.

Though originally meant for the propitation of the Gods, the Kattu has been the harbinger of the Kathakali in Travancore; and

the belief underlying this ancient institution is that recitations from the Furāṇās and Itihāsās are as efficacious in obtairing salvation for men as Divine service, and are a powerful check on the growing materialism of the people.

Among other items of work in the year, prominent mention may be made of the progress made in the compilation of the Topographical list of inscriptions in the State, and of the Bibliography of the sources of Travaucore History.

### Publications.

The booklet on the art of Kathakali originally printed for private circulation was considerably revised and enlarged in the year, and is being made ready for distribution and sale. Vol. VII Part 2 of the Travancore Archaeological series has been published; while the material for Vol. VIII consisting of the inscriptional collections of the Department for the last four years (1103—1106) has been got ready for the press. The publication of the Archaeological sheet of the Government Gazette received also the regular attention of the Department; and the inscriptions relating to Lyyan Atikal and Śrī-Vallabhan Kōdai were printed with their text and purport in Malayalam, and disseminated for popular knowledge.

In conclusion, I have only to quote what Sir John Marshall stated thirty years ago. "It is the intention of the Department to show year by year what materials have been and are collected exactly, so that other labourers may know how they can add to the heap, and if possible themselves build from it the ultimate edifice, the materials being therefore silently accumulated for the future. In other words, it is the intention by means of the Annual reports to show that the Department so far from looking to monopolise the field of research welcomes and facilitates the co-operation of every earnest student and learned society" in Trāvancōre "to attract wider and more abiding attention to the grand treasure house of ancient relics" in the State.

Subjoined is a statement of the receipts and expenditure of the Department.

	TERCET	PIS.	Rs.	Ch.	C.
Sale of Photos			16	8	0.
Sale of Archæologic			39	27	0
Sale of Elements of	Hindu Icon	nography	73	8	U
Miscellaneous	•••	•••	31	15	0
		Total	161	2	0

## EXPENDITURE.

Salary of the Superint	endent	of	Rs.	Ch.	C.
Archaeology	***		1800	0	0
Pay of the Establishm	ent		2062	3	7
Contingencies			866	18	0
Travelling allowance			398	17	9
		Total	5127	11	0

I have the honour to be, Sir, Your most obedient servant,

R. VASUDEVA PODUVAL, Superintendent of Archaelogy.

# List of places visited by the Superintendent in 1107.

## Chingam 1107

Kalingarāyanpatjaņam

Nagercoil

Katukkara

Vettikavila

#### Kanni

Quilon

Marārikkulam

Puthenchira

#### Dhanu

Chonakkara

Kaviyar

Kānnīrapalli

Sattannurppara

#### Makaram

Kaniyakulam

Okkāl

Kutturpalli

### Mithunam

Parar

Pallippuram

Köttappuram

Vettikulangara

#### Karkatakam

Chenkõtta

Māvēlikkara

Alleppey

Puthenchira

Maññumel

Varapoly

Köttayam

Ettumanur

# List of places visited by the Pandit Assistant during 1107.

#### Kumbham

Suchindram

#### Karkatakam

SuchIndram

Tamarakulam

Cape Comorin

Lurattiyara

APPENDIX A.

From whom received. Dynasty.	Dynasty.	King.	Date.	Date- Alphabet.	Remarks.
Copy of a copper. plate received from the District Judge, Nagercoil.	ı		Ko. 826 Vir- odhi Pura- tuni 27 Da- fumi Mon- day Tiru- vonam.	imono	Registers a gift of 10 temples to SrI-Ranga Raja Pattar Nambiyār of Alvartirunagari under Royal Command.

Lithic inscriptions copied during the year 1107 M. E.

·oN	Place.	Dynasty.	King.	Date.	Language.	Remarks.
-	On a rock lying in the Tiruvënkata- pperumal temple at Katukkara.	1	I	Sa. 1628. Ko.882 Tai. 13. Bahula. Panchami. Thursday.	F Con	Registers a Vitta Jayina pramana executed by Samvanaperofinal alias Verrivelum Tampirankutți Tapuvan in favour of God Tiruvenkatapperumal of Patichagiri Parvathachal at Kataksan in Alakiva.
64	2 On a rock lying in the Tiruvenkita- pperumal coil at Katukkara.	. 1	ı	Sa. 1628 Ko. 882 Tei, 18 Sunday.	g ming	pandiyapuran, and states that Some lands were set apart for Pājās feeding, lighting etc.  Refers to a gift of land by Karakku Andar Marayakutti Ullittar to Namar Kasīvisvanātha Namar, Sivakāmi Amman and Truvēnkatapperunāl for conducting pājāsand
90	3 On a stone pillar standing N. E. of Panantaravijāgam village near Kaţuk-kara.	1	ì	Sa. 1633 Ko. 887 Tai 14.	Ď.	for offering Tiru-amutu, garlands lights, etc.  Refers to the gift of land for conducting the "pajas" of Virakeraja Pillayar of Panantharavijagan by Kari Chatmakutti and Anafichaperumal Marttanda Kutti Üllitter,

e the nten- rs the deity metni sman	Nava-	ion Sivin-
kartta and Papdaram will be the Trustees for the proper maintenance of the charity.  Damaged at the end. Registers the gift of land for offering to the deity of Umaskantha Sahitha Tiruméni set up by Arangan Tiruvikraman of Sivalanangalam.	tates that the Brahmin of Nava- bhavanam (Puttillam) residing at Suchindram consecrated the God Sambhu with Goddess Gouri.	he major part of this inscription under the ground, Mentions Sivin- tiram Udaya Nayanār.
the prohamity.  Land.  Loffering a Sahit  Mgan  galam.	Brahn oonsech Goddes	he major part of this i under the ground, Mer tiram Udaya Nayanār.
und Pastor the charthal for the land for the	nat the ann (Pu dram u with	or part the gro
kartta and Pandaram Trustees for the pro- ance of the charity. Damaged at the end. gift of land for offerin of Umaskantha rahis set up by Arangan of Sivalanangalam.	States that the Brahmin of Nava-bhavanam (Puttillam) residing at Suchindram consecrated the God Sambhu with Goddess Gouri.	The major part of this inscription under the ground. Mentions Sivi tiram Udaya Navanār.
å "S	Sonskrit Sonskrit	Tamil
or abba. mam.	*	A C
Ko. 391 Jupiter Vrishabha. Mithunam.	Kali वन्त्री विश्वस्य सूर्य Makara Sa- ptami Kcha- ni,Jupiter in Ohanu,Mon- day Kolam- lva, express-	edinthe Chr onogram Ja tasunjae (769) Ko. 413 Medam 1
	3	
i	1	
	:	1
outer wall of the let Prakāra just son hof the Jaya-ntisvaramahādēva shrine in the Sthannathasvāmi	temple at Sachin- dram.  In the central the Jayantisvara Manjapa below the new opening of the same.	of the Subrah manya ten ple in the same.
On the northern outer wall of the let Prakāra just sou hof the Jaya ntisvaramahādev; shrine in the Sthaumathasvām	temple at Suchin dram.  5 On the central Uttara stone in the Jayantīšvar Manṭapa belov the new opening of the same.	On the south base of the Subrah ten ple it the same.
r wa r wa Prál h of varst	comple at St dram. In the cer Uttara sto the Jayanti Manjapa the new op the same.	in the sout of the Sub manya ter
oute let son shrii Stha	temple dram. On the Cutars the Manta the n	Dang Dang Dang

Lithic inscriptions copied during the year 1107 M. E

Place.	Dynasty.	King.	King. Date.	Language.	Remarks.
7 On a pillar in front of the Pancha- linga Shrine of the same.	Trāvancòre	Marcanda Varman	Ko. 586 Sa. Ragaloku	Sanskrit and Grantha	Travancore Marcanda Ko. 586 Sa. Sanskritand States that king Martanda-varma Varman Ragaloka Grantha desiring prosperity, fame and long life constructed the Sabha Mantapa.  The same inscription beginning
SOn the eastern wall of the 1st Prakara of the same (in fr-	Do.	I	Ko. 318 Mi-Tamil thunam 6, Thursday,	mingle	from Rāga-jokā has also beer en- graved on the eastern wall of the second Prākāra. States that Kevalan Vikrannechēja Devanen made a gift of 71 Acchā to Suchindramujaya Nāyanār for
ont of the Vatak.  9 On the Western Pandya  Prakara North of	Рардуя	VIrapāņdys	Tiruvatirai Virapāņdya Kollam 432 Do. Dhana 19	Do.	offering tiru-amutu while chanting Mantras. This is a Jayakada-ölai written by the assembly and Sri-käriyam of
of the same.			F.kādaśi		that Chokkattapdal alias Ulakamu- latudaiyal, the Nambirattiyar of Virapapdya Deva made a gift of 200 Patasam-Accha for daily

hiramuta of SuchIndramutaya: Nayanar and for feeding 3 Brahmins during the time of the Pajās. Damaged.	.Do.	Records the gift of land by the assembly of Suchfindram to Dvara-kai Emperumanar and mentions Gövinda-Pranja-Bhidarar.	Registers a gift of 10 acchu for burning a perpetual lamp in the temple of Srf-Dvārakai Emperuman. Mentions Pallikkal Nair.	Sanskrit and Begins with the introduction surfar-Granta for Mentions Vira Nrisimba, Atchyuta Raya, Ranga Raya, Krishpa Raya, R
Dô.	Do.	200 MJ	Tamil	Sanskrit and Granta
Kollam 328 Edavam 8	Kollam 340	Kollam 404 Thulam 1	Kollam 400	) <u>:</u>
i	1	1	i	:
· :	:	:	ŧ	Vijayana- gara.
of the Western profitation of the same.	Do.	of the Central shrine of the Dva- rakai Emperuman temple near the	(choultry)  13 On the north base of the ardhaman- tapa of the same.	On the base of the Deaja standha of the Kanya Bhaga-vathi temple at Kanyakumari Cape Comorin.

Lithic inscriptions copied during the year 1107 M. E.—(won'd.)

·ON	Place.	Dynasty.	King.	Date.	Language.	Remarks.
4.2	of the second pra kara of the same.	Chola	Rajendra Choja		de Jamil	Begins with the introduction 'Bog-
9	16 On a rock lying in Kuravantattu vila, Kurattiyara.	Do	Parakēsari- Varma	The state of the s	Mage (M)	Vatteluttu Damaged.
~	On the base of the inner shrine of the Sasta temple at Chattannur.	i	:	Kollam 446 Jupitor in Vrischiga, Medam		Records that the work in connection with the construction of the temple was commenced in Medam 448 and was completed in Medam 448.  Mentions the names of Devan Rudran Variyar and Sankaran Sattan,

# APPENDIX B.

# List of photos taken during the year 1107.

1 to 18	Hand poses (Mudras) in Hindu Ar	t Full plate
19	King stone in the NIlakantasvām temple at Padmanābhapuram	
20	Indrajit image (stone) Do.	Do.
21 to 23	Stone pillars lying in front of th temple at Parakkai	
24 to 26	Stone images in the Mukhamantap of Śrī-Padmanābhasvāmi templ Trivāndrum	a le, Do.
27	Ornamental lamp in front of the Mukhamantaps of Srī Padmanā bhasvāmi temple, Trivandrum	3
28	Yali pillars lying in front of the temple at Parakkai	
29 to 30	Vēlakaļi at Trivandrum	Do.
31 to 40	THE TO A SECOND STREET	Quarter plate.

#### APPENDIX C.

### SALAGRAMAS

(A Note).

Sālagrāmās are a kind of round or oval fossil cephalopodes flecked or inlaid with gold and having a peculiar hole and certain distinguishing marks of identification in them. The name Salagrama is derived from the Sanskrit Sarachakra, the weapon of Vishnu which is reflected on the stone "by queer spiral lines believed to be engraved thereon at the request of Vishnu by Brahma who in the form of a worm is believed to bore the holes known as Vadanas and traces the spiral coil that gives the stone its name". These stones are generally found in the bed of the Gandak river, a mountain torrent from the Himalayas in Nepal. When worshipped properly they are believed to yield Purushartha:

i. Dharma ii. Artha iii. Kāma Noksha.

Salagramas are of two kinds: JALAJA born in water and STHALAJA born in earth, the former soft and glistening contributing wealth and happiness, and the latter rough and hard producing Salvation. Both the varieties have the mark of a Chakra or discus, some having the shape of Vishnu and others of Chit. The holes in the stones are bored by worms called 'svajrakīta"; those that are bored by one worm are called Stvichakra, by two worms Chatuschakra, and by four worms Ashtachakra. Sālāgrāmās marked with chakra (discus) may be white, black, blue, skyblue, blue like the flowers of Atasi, gold yellow, turmeric yellow, yellow-white, red, dark red, tawny, copper red, reddish brown, variegated in colour black spotted, snake coloured, colourless or glistening. coloured Salagrama is called Vasudeva, Gold yellow Hiranya Garbha; yellow Śrīdhara; black Vishņu, Krishņa, Nārāyaņa, Dāmodara, ot Aniruddha,; wine coloured Madhava; red Sankarshapa; tawny Narasimha; variegated Ananta; bright and golden Vāmana. White Sāla grāma gives salvation, blue wealth, black prosperity, darkblack fame, yellow white and gold yellow riches, pale white fame, and red kingdom.

# Selection of Salagramas.

After they are picked up from the bad of the river, the Sale gramas are tested and selected. "Each stone as it is discovered in atruck on all sides with a small hammur, or in some cases is merely knoczed with the finger. This causes the soft powdery part produced by the boring of the worm to fall in and disclose the Vadana

# To face page 22.



Sālagrāma.



or hole which in the case of those of the more valuable ones, may contain gold or precious gem". Generally, those Salagramas that are cold in touch, glistening, round shaped, and with head raised are taken for worship; while black, blue black, yellow, of different colours, red and with Chakra mark on the left side or on the middle part in the hole and with a roundshaped Vanamala (garland of flowers) The belief under-lying their worship is that are also worshipped. all of them will bestow wealth and happiness. The stones that are glistening and round shaped yield success; those that are fine yellow and delicate, produce wealth; while the black ones bring about fruit-The blue black sälagrāmās offer fame; and the white ones salvation; while those that have different colours bless the worshipper with happiness. The red coloured variety gives kingdom; but those with "chakra" (discus)on the left side or on the middle ensure increase of family. Such of the stones as have the "chakra" in the hole bring about fame. The stones with the Vanamala give good wife; while those with lotus mark yield cows, wealth and grains. A Salagrama which is not stout or broken and which is neither dark, black nor hard to touch will bestow kingdom, happiness in life and salvation. When Salagrama with "Chakras" and the filament of flowers and Vanamala is worshipped with proper ritual in a house, there need be no fear of poverty, of robbers or of fire, or even the evil influence of planets. The stones which look like jambu and Amalaki and have two Chakra marks are said to have the abode of Vishnu in them.

The following kinds of stones are not advised for worship:

- Stones fierce in appearance
- 2. Stones with Chakras cross vice.
- Stones with Chakras facing intermediate directions.
- 4. Stones without Chakra or with broken Chakras.
- Stones with doubtful colours or with dark spots and smoky in appearance.

# Different kinds of Salagrama.

There are different kinds of Sālagrāma of which, the Matsya, Kēšava, Haya etc. and Kapila, Yajñabhakta, Mukunda. Hamsa etc. are called Harimurtti. There is also another variety called Trimurtti.

MATSYAMÜRTTI. The Sälagrāma that is long in sitape, glistening and having two chakrās in the hole and one on the tail is the Matsyamurtti and resembles the form of a fish. If its Vadana or face is like that of fish, and if there is a Chakra on it, and above all if it is adorned by Śrī-Vatsa and Vanamāla, then that stone is good

or worship. Two chakrās in the mouth and a hole or a chakra on he back of the Matsyamūrtti Sālagrāma indicate that it is certainly uspicious. There are four or five varieties of this stone which if luly worshipped will infallibly enrich its possessor.

- 2. KŪRMA. This Stone possesses a lofty back, is white and has Göpura. Kūrma Sālagrāmās with two chakrās in the mouth are ound rarely; while those with three specks or dots on the back, with onchshell and disc, with long mouth on the right and left sides, with wo chakrās and with three kusulas (granaries) are difficult to obtain. In who gets a sample of it is lucky; and when worshipped properly all desires are fulfilled. The Kūrma sālagrāma that is both round nd long, glittering like gold, possessing for the mouth two discs, aving the shape of a flower or conch on either side of it, is considered good for propitiation. But the one that is round and lotus shaped, aving long mouth and two discs in the navel, and slightly raised on the back, and above all dark red in colour increases the family and brings prosperity.
- 3. VARĀHA SĀLAGRĀMA. The stone that is blue black ike Atasi flower, or blue lotus, long in shape and moist in touch naving long hole and raised on the back, with wide mouth and having Chakra on the left side and golden lines, is called Varāha-mūrtti and gives wealth and kingdom.
- 4. LAKSHMI NARASIMHA SĀLAGRĀMA is black in olour and spotted, and has discs on the left side. It bestows happiness and good fortune. But those expecially that have wide mouth and are tawny in colour, glistening like gold, with two discs in the nouth, and above all having a darable seat and a bent on the back sonfer on their worshippers all happiness and fulfil all their desires.
- 5. VĀMANAMŪRTTI This is short, spotted and circular, and tas the colour of Atasi flower. It has two chakrās, in its Vadana or nouth, and is supposed to give all happiness. Vāmana Sālagrāma vith white spots on the face gives cows, land, corn and wealth. If a blue or blue black Chakra is found near the mouth, it is called Mahāvāmana which is very rare and fulfils all desires.
- 6. PARASURAMAMURTTI. That stone having the form of a Parabu (battle axe) and white or black hoofs, long and broad toles with dots or speeks on the right or left side, and a line esembling tusks is called Parasurama Salagrama worshipped isually by men of noble minds. The Salagrama having the narks of battle axe and two chakras on the upper side should be worshipped by all
- 7. SRI RAMA. The Salagrams having the grace of a

discs with filaments is called Rāmamūrtti. If it is long and black, and has one disc on the left side and three discs in all, it is called Sītārāma. The long and black variety of it having two mouths (Vadanās) and four discs gives wealth; while those with three vadanās and five or six discs and having the mark of arrows confer happiness.

- 8. BALARÂMA. The Sālagrāma that has the marks of a plough and a club and is bright as glass is called Sañkarshana. Its other characteristics are two discs at the head, blue lotus in front, and a red colour like blood. This stone blesses its worshipper with alround success. A sālagrāma having a stout chakra, and a tawny and red colour is called Balabhadra, which if propitiated is said to increase one's family.
- 9. KRISHNAMÜRTTI. Its features are a jet black colour, stoot shape, a lovely form, a Vanamāla or garland of flowers and a mark of Sri Vatsa on the back. This stone when worshipped brings good to all. A variety of this with black yellow colour, a symmetry of body, two chakrās on the sides of the raised portion, a nasal like hole and a mace like back, and the club heads on the sides, is called Gopālakrishna which is said to give cows, land, corn, wealth, etc.

Another one black in colour, spotted and glittering, shaped like a Chakra, and having very minute holes and red lines known as Gopālamūrti bestows all kinds of fortunes.

- 10. KALKI is shining like a blue stone and is long shaped. It is adorned with Vanamāla (garland of flowers) and has a face like a hood. It is supposed to fulfil all desires. Its other features are a red Chakra with a small hole, a durable seat, and a line shining like a sword on the back. Kalki is the Lord of Miecchās; and if worshipped properly he drives away sin in the Kaliyuga.
- 11. KEŚAVA MÜRTTI. This Sālagrāma glitters with golden and silver specks, and has a small Chakra. This stone has four corners and two Chakrās on the Vadana or opening. It is black and is believed to bring good fortune.
- 12. NARAYANA MÜKTTI is black and has a Chakra on the navel. It has three long lines and a broad opening on the right side. It is high and round in shape, and has a hood and Chakra. It satisfies all desires of men, and in particular confers bappiness and fortune.

- LAKSHMINĀRĀYAŅA stone has the marks of Sankha, Chakra and Gada. The Chakras may be four, three or one, and it fulfills the desires of men.
- 14. MADHAVA MÜRTTI Sälagräma has the colour of wine or honey, and a disc on the middle. It is oily and has a small opening and confers salvation to ascetics.
- 15. MADHUSÜDHANA MÜRTTI is found to possess one Chakra and has a majestic grace. It is found in all colours and gives good fortune to men.
- 16. GOVINDAMÜRTTI. This stone is black, and not much stout, and is found with five discs Govindasalsgrama with two Chakras confers all objects of desire.
- 17. VISHNUMURTTI has a bowed head and broad opening. It is oily and tawny coloured, and has a disc on the left side. It gives both success and enjoyment.
- TRIVIKRAMAWÜRTTI Salagrama is worshipped by pious Brahmins, and has three corners and two discs.
- 19. ŠRIDHARAMŪRTTI is like the flower of Kadamba tree and has five lines. It is also marked by a Vanamāla, a lotus on its small face or the middle, and a black colour.
- 20. HRISHIKĒŠAMŪRTTI. This stone has a shape of Kadamba flower and has five lines. Its form is like a crescent moon; and it has five, three or one Chakra.

There is one stone known as UGRA CHAKRA SĀLA-GRĀMA which is not a particularly safe one to possess. It is round and has two Chakrās. If not worshipped properly, it is believed to bring ruin to its owner.

"Possession of these Sālagrāmās without worship is believed by all Hindus to be most unlucky; and as none but Brahmins can perform the worship, none but they can retain the stones in their keeping. For an orthodox Brahmin household, the ownership of three or more stones is an absolute necessity. These must be duly worshipped, and washed in water, and the water drunk as TIRTHA; and sacrifice of boiled rice and other food must be daily performed. When this is done, speedy success in all business of life will fall to the lot of the inmates of the house; but otherwise ruin and disgrace await them."

#### APPENDIX D.

Sixty four Mudrās (Hand Poses) in Kāttv.

NOTE:— They are the same as those described in Bharatā's

Nāṭyaśastra.

# ASAMYUKTA (Single)

- 1. Patāka
- Tripatāka
- 3. Kartarimukha
- 4. Ardhachaudra
- 5. Arala
- 6. Sukatunda
- Mushti
- 8. Sikhara
- 9. Kapittha
- 10. Katakamukha
- 11. Suchīmukha
- 12. Patmakośa
- 13. Sarpasiras
- 14. Mrigašīrshaka
- 15. Kanguli
- 16. Dalapallava
- 17. Chathura
- 18. Bhramara
- 19. Hamsāsya
- 20. Hanisapaksha
- 21. Samdamsa
- 22. Mukula
- 23. Urnanābha
- 24. Tāmṛachūḍa

### SAMYUKTA (Double hands)

- Anjali
- 2. Kapōtaka
- 3. Karkkata
- 4. Svastika
- 5. Katakayardhamana
- 6. Utsanga
- 7. Nishēdha
- Dola
- 9. Pushpaputa
- 10. Makara
- Gajadanta
- 12. Avahitha
- 13 Vardhamāna

# MUDRAS IN NRITTA OR DANCE

- 1. Chathura
- 2. Udvrītta
- 3. Talamukha
- 4. Svastika
- 5. Viprakīrna
- Arālakatakāmukha
- 7. Avidhavakra
- 8. Suchi
- 9. Rechitha
- 10. Ardharechita
- 11. Uttāna Vanchita
- 12. Pallava
- 13. Nitamba
- 14. Kēšabandha
- 15. Lata
- 16. Karihasta
- 17. Paksha Vanchitaka
- 18. Pradyotaka
- 19. Garuda Paksha
- 20. Danda Paksha
- 21. Ardhamandali
- 22. Pärévamandali
- 23. Urēmandali
- 24. Nalini
- 25. Padmakōśaka.
- 26. Alapallava
- 27. Bana

#### APPENDIX E.

## List of additions to the Library during 1107.

- Conservation Manual (Sir John Marshall)
- 2 The Mahratta Rajas of Tanjore (Subramanian)
- 3 Folk tales of Sind and Guzerat (Kincaid).
- 4 The Glories of Magadha (J N. Samaldar).
- 5 The Romance of Archaeology.
- 6 The camera book (Mervyn Thompson).
- 7 A. B. C. of art (Blackie).
- 8 The outline of art (Sir William Orpen).
- 9 Southern Indian Bronzes (Gangoly).
- 10 The Dictionary of Hindu architecture.
- 11 Journal of the Madras University I to III Volumes,
- 12 Dravidic studies Nos. 1 to 4.
- 13 Pallavas of Kanchi (R. Gopalan).
- 14 Critical survey of the Malayalam Language and literature.
- 15 Purananuttin Palamai.
- 16 Agastia in the Tamil land.
- 17 Hindu administrative Institutions.
- 18 The theories of Rasa and Dhyani,
- 19 Tamil Sangam age.
- 20 An essay on the origin of the South Indian temples.
- 21 Excavation supplement (Mysore).
- 22 Introduction to Indian art (Coomaraswami).
- 23 Malabar and the Dutch (Panikkar).
- 24 Portrait sculpture of South India (T. G. Aravamuthan).
- 25 Hindu Administrative Institutions in South India (S. K. Iyengar).
- 26 The Rgvedanukramani of Madhavabhatta (C. Kunhan Raja).
- 27 Rasa Ratnakara Salva (Venkata Rao).
- 28 The Sphotasidhi with the Gopalika (S. K. Ramanatha Sastri).
- 29 Kerala theatre (K. R. Pisharoti).
- 30 Linganusasana (Harsavardhana).
- 31 Vishnu Purana (Bhavana Rayan).

32	Kavirajumarkgui	n (Venkita Rao	).	
33	Annual Report of	of the Cochin A	rchæologie	al Depart-
34	Do.	South Inc	lian Epiger	phy.
35	Do.	Mysore A	rchaeologic	al Depart-
				[ment.
36	Do.	Ceylon	Do.	Do.
37	Quarterly Journa	l of Mythic Soc	iety.	
38	Epigraphia Indica	• • • • • • • • • • • • • • • • • • • •	•	
39	Kerala Society pa	pers-		
40	Madras Governm	ent Museum Bu	Letin	
41	Bulletin of the M	useum, Fine ar	ts, Boston	
42	Le Monde Orient			
43	Visvabharathi Qu	arterly.		
44	Journal of the Bo	ombay Historica	Society.	
45	Dwaja-	MJ2072	•	
46	Chentamil			
17	Madras Presidence	y College Magaz	tine.	
18	Madeas Christian			

